

REMARKS

This Amendment responds to the Office Action mailed September 14, 2006 in the above-identified application. Based on the foregoing amendments and the following comments, reconsideration and allowance of the application are respectfully requested.

Claims 1-16 are pending in the application. By this Amendment, independent claims 1 and 15 are amended. The amendment finds clear support in the application as filed at least at page 23, line 20. No new matter is added.

The Examiner has rejected claims 1-7 and 10-16 under 35 U.S.C. §102(e) as anticipated by Schmidt (U.S. Patent No. 6,782,465). Claims 8 and 9 are rejected under 35 U.S.C. §103(a) as unpatentable over Schmidt in view of Patariu, et al. (U.S. Publication No. 2004/0208314). The rejections are respectfully traversed in view of the amended claims.

Schmidt discloses a linked list DMA descriptor which includes an indication of a number of data pointers contained in a subsequent DMA descriptor (abstract). An example of a linked list of DMA descriptors is shown in Fig. 2 of Schmidt. The linked list includes a first descriptor 20, a second descriptor 30 and a subsequent descriptor 44 (col. 2, lines 36-51). The second descriptor 30 includes two data pointers 36 and 40 that reference two data blocks to be moved. Words 34 and 36 store the length of a first data block (256 bytes) and its address, and words 38 and 40 reference a second data block (32 bytes) and its address (col. 2, lines 55-61).

Amended claim 1 is directed to a DMA controller comprising a DMA data path for transferring data from a DMA source to a DMA destination, and channel control logic for controlling transfer of data through the DMA data path in response to parameters contained in at least one DMA descriptor having a programmable format, wherein each DMA descriptor defines a single DMA transfer.

The present application and Schmidt use the term "DMA descriptor" to mean different things. In Schmidt, the DMA descriptor is an array of up to four pointers to data blocks to be

transferred. Each data pointer and associated information in Schmidt has two 32-bit words and is fixed in format. By contrast, each "DMA descriptor", as described in the present application, defines a single DMA transfer and has a programmable format. The DMA descriptors with programmable format are described in the present application at least at page 23, line 18 to page 25, line 19. Schmidt, by contrast, contains no disclosure or suggestion of a DMA descriptor which defines a single DMA transfer and which has a programmable format, as claimed. Instead, using Applicant's definition of "DMA descriptor", Schmidt discloses descriptor arrays each having one or more DMA descriptors, wherein each DMA descriptor in a descriptor array has a fixed format. For these reasons, amended claim 1 is clearly and patentably distinguished over Schmidt, and withdrawal of the rejection is respectfully requested.

Claims 2-14 depend from claim 1 and are patentable over Schmidt for at least the same reasons as claim 1.

Amended claim 15 is directed to a method for DMA transfer comprising providing a DMA datapath for transferring data from a DMA source to a DMA destination, and controlling transfer of data through the DMA datapath in response to parameters contained in at least one DMA descriptor having a programmable format, wherein each DMA descriptor defines a single DMA transfer.

As discussed above in connection with claim 1, Schmidt does not disclose or suggest a DMA descriptor which defines a single DMA transfer and which has a programmable format. For these reasons and for the reasons discussed above in connection with claim 1, amended claim 15 is clearly and patentably distinguished over Schmidt, and withdrawal of the rejection is respectfully requested.

Claim 16 depends from claim 15 and is patentable over Schmidt for at least the same reasons as claims 1 and 15.

Based upon the above discussion, claims 1-16 are in condition for allowance.

CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

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Respectfully submitted,

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